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WHAT IS CLAIMED IS:

1. A method of monitoring the activation of programmed sequences of a programmed system comprising at least a first and a second programmed sequence, each to be executed iteratively, wherein said first programmed

5   sequence is made to monitor the execution of said second programmed sequence, and said second programmed sequence is made to monitor said first programmed sequence.

10   2. The method of claim 1, wherein said programmed sequences are taken from the group consisting of: routines and main program loops.

3. The method of claim 1, wherein said programmed

15   sequences comprise at least one interrupt routine.

4. The method claim 3, wherein said at least one interrupt routine is triggered by an event generated by a timer or an external signal.

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5. The method of claim 1, wherein said first programmed sequence incorporates the steps of resetting a first counter associated therewith and incrementing a second counter associated with said second programmed

25   sequence, and said second programmed sequence incorporates the steps of resetting said second counter and incrementing said first counter, a failure in the activation of a particular programmed sequence being detected when a counter associated with that sequence

30   reaches a predetermined threshold.

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6. The method of claim 5, wherein said predetermined threshold for a given counter is established so as to be reached upon just one failure of the associated programmed sequence to reset that counter.

7. The method of claim 1, wherein a failure in the activation of a programmed sequence, as determined by said monitoring, is made to cause a complete or partial reset of said programmed system.

8. A method of monitoring the activation of N programmed sequences in a programmed system, each to be executed iteratively, N being an integer greater than 1, wherein each of said N programmed sequences is monitored by at least one other programmed sequence.

9. The method of claim 8, wherein each of said N programmed sequence is monitored by each of the N-1 other programmed sequences.

10. The method of claim 8, wherein each programmed sequence performs the monitoring function by incrementing a value in a respective counter associated with each programmed sequence it monitors and by checking, for each said counter, that the corresponding value has not reached a predetermined threshold, and wherein each monitored programmed sequence resets the counter associated therewith, a failure in the activation of a particular programmed sequence being detected when a counter associated with that sequence reaches a predetermined threshold.

11. The method of claim 10, wherein, for a given counter, said predetermined threshold is established so

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as to be reached upon just one failure of the associated programmed sequence to reset that counter.

12. The method of claim 8, wherein said N programmed
5   sequences are taken from the group consisting of: routines and main program loops.

13. The method of claim 8, wherein said programmed sequences comprise interrupt routines.
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14. The method of claim 13, wherein said interrupt routine is triggered by an event generated by a timer or an external signal.

15 15. The method of claim 8, wherein a failure in the activation of a programmed sequence, as determined by said monitoring, is made to cause a complete or partial reset of said programmed system.

20 16. A computer program comprising at least a first and a second programmed sequence, each to be executed iteratively, wherein said first programmed sequence incorporates instructions for monitoring the execution of said second programmed sequence, and said second
25 programmed sequence incorporates instructions for monitoring said first programmed sequence.

17. The program of claim 16, wherein said programmed sequences are taken from the group consisting of:
30 routines and main program loops.

18. The program of claim 17, wherein said programmed sequences comprise interrupt routines.

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19.   The program of claim 16, wherein said first programmed sequence comprises the steps of resetting a first counter associated therewith and incrementing a second counter associated with said second programmed
5   sequence, and said second programmed sequence comprises the steps of resetting said second counter and incrementing said first counter, a failure in the activation of a particular programmed sequence being detected when a counter associated with that sequence
10   reaches a predetermined threshold.

20.   The program of claim 19, wherein, for a given counter, said predetermined threshold is established so as to be reached upon just one failure of the
15   corresponding programmed sequence to reset that counter.

21.   A medium containing the program according to any preceding program claim.
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22.   A computer program comprising N programmed sequences, each to be executed iteratively, N being an integer greater than 1, wherein each of said programmed sequences is monitored by at least one other programmed
25   sequence.

23.   The program of claim 22, wherein each programmed sequence is monitored by each of the N-1 other programmed sequences.
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24.   The program of claim 22, wherein each programmed sequence comprises program steps for incrementing a value in a respective counter associated with each programmed sequence it monitors and for checking, for
35   each said counter, that the corresponding value has not

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reached a predetermined threshold, and wherein each monitored programmed sequence resets the counter associated therewith, a failure in the activation of a particular programmed sequence being detected when a
5 counter associated with that sequence reaches a predetermined threshold.

25. The program of claim 22, wherein said programmed sequences are taken from the group consisting of:
10 routines and main program loops.

26. The program of claim 25, wherein said programmed sequences comprise interrupt routines.

15 27. A medium containing the program according to any preceding program claim.

28. A programmed apparatus for executing iteratively at least a first and a second programmed sequence,
20 comprising first means associated with said first programmed sequence to monitor the execution of said second programmed sequence, and second means associated with said second programmed sequence to monitor said first programmed sequence.
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29. The apparatus of claim 28, wherein said programmed sequences are taken from the group consisting of: routines and main program loops.

30 30. The apparatus of claim 28, wherein said programmed sequences comprise at least one interrupt routine.

31. The apparatus of claim 30, wherein said interrupt routine is triggered by an event generated by a timer
35 or an external signal.

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32. The apparatus of claim 28, wherein said first means comprise means for resetting a first counter associated therewith and means for incrementing a second counter associated with said second means, and said second means comprise means for resetting said second counter and incrementing said first counter, said apparatus being operative to detect a failure in the activation of a particular programmed sequence when a counter associated with that sequence reaches a predetermined threshold.

33. The apparatus of claim 32, wherein said predetermined threshold is established so as to be reached upon just one failure of a programmed sequence to reset the corresponding counter.

34. The apparatus of claim 28, wherein a failure in the activation of a programmed sequence, as determined by said monitoring, is made to cause a complete or partial reset of said apparatus.

35. An apparatus for executing at least N programmed sequences, each to be executed iteratively, N being an integer greater than 1, wherein each of said N programmed sequences is monitored by at least one of the N-1 other programmed sequence.

36. The apparatus of claim 35, wherein each programmed sequence is monitored by each of the N-1 other programmed sequences.

37. The apparatus of claim 35, wherein each of said N programmed sequence is arranged to effect said monitoring function by incrementing a value in a

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counter associated with each respective programmed sequence it monitors and by checking, for each said counter, that the corresponding value has not reached a predetermined threshold, and wherein each monitored
5 programmed sequence is arranged to reset the counter associated therewith, a failure in the activation of a particular programmed sequence being detected when a counter associated with that sequence reaches a predetermined threshold.
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38.   The apparatus of claim 37, wherein said predetermined threshold is established so as to be reached upon just one failure of a programmed sequence to reset the corresponding counter.
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39.   The apparatus of claim 35, wherein said programmed sequences are taken from the group consisting of: routines and main program loops.

20 40.   The apparatus of claim 39, wherein said programmed sequences comprise interrupt routines.

41.   The apparatus of claim 40, wherein said interrupt routines are triggered by events generated by a timer
25 or external signals.

42.   The apparatus of claim 35, wherein a failure in the activation of a programmed sequence, as determined by said monitoring, is made to cause a complete or
30 partial reset of said apparatus.